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DATE MAILED: 03/03/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

23869 7590 03/03/2010 HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE

SYOSSET, NY 11791

EXAMINER
THETHEN, MARINA ANNETTE
ART UNIT PAPER NUMBER
3753

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/566,611	01/31/2006	Gerhard Liepold	1350-3 PCT/US	7406			
TITLE OF INVENTION: VALVE							

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 YES
 \$755
 \$300
 \$0
 \$1055
 06/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This appropriate. All further a indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed other ions.	or transmitting the ISS og the Patent, advance nerwise in Block 1, by	SUE FEE and PUBLICA orders and notification of (a) specifying a new cor	TION FEE (if requirements of the control of the con	ired). I will be ; and/o	Blocks 1 through 5 st mailed to the current r (b) indicating a sepa	nould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
HOFFMANN & 6900 JERICHO SYOSSET, NY		/2010	1	Cer bereby certify that the	rtificat	e of Mailing or Transi	
							(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
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nonprovisional	YES	\$755	\$300	\$0		\$1055	06/03/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	7			
TIETJEN, MARI	NA ANNETTE	3753	251-252000	_			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident n in 37 CFR 3.11. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON	registered attorney of 2 registered patent a listed, no name will THE PATENT (print or	ntively, gle firm (having as a r agent) and the nan ttorneys or agents. If be printed. type) patent. If an assign assignment.	a memb nes of u no nan	per a 2p to ne is 3	ocument has been filed for
Please check the appropri	ate assignee category or	categories (will not be	printed on the patent):	☐ Individual ☐ C	orporat	ion or other private gro	up entity Government
4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - #	o small entity discount p		4b. Payment of Fee(s): (P A check is enclose. Payment by credit The Director is here overpayment, to De	i. card. Form PTO-203	8 is atta	ached. required fee(s), any de	
	SMALL ENTITY state	is. See 37 CFR 1.27.				TITY status. See 37 CF	
interest as shown by the r	Publication Fee (if requeended of the United Sta	uired) will not be accept tes Patent and Tradema	ted from anyone other tha rk Office.	n the applicant; a reg	istered	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration !			
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The informat U.S.C. 122 and 37 CFI USPTO. Time will var den, should be sent to t O NOT SEND FEES OR	tion is required to obtain of R 1.14. This collection is ry depending upon the in the Chief Information Off R COMPLETED FORMS	or retain a benefit by estimated to take 12 dividual case. Any co icer, U.S. Patent and TO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tir nark Office, U.S. Depa D TO: Commissioner I	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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SYOSSET, NY 1	1791	3753				

DATE MAILED: 03/03/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 416 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 416 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/566,611 LIEPOLD ET AL. Notice of Allowability Examiner Art Unit MARINA TIETJEN 3753 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the Amendment filed 01/04/2020. The allowed claim(s) is/are 50-54 and 56-90. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. X Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 3. Information Disclosure Statements (PTO/SB/08), 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

/M. T./ Examiner, Art Unit 3753 Application/Control Number: 10/566,611 Page 2

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DETAILED ACTION

Allowable Subject Matter

- Claims 50-54, and 56-90 are allowed.
- 2. Claims 68-90, previously withdrawn from consideration as a result of a restriction requirement, require all the limitations of an allowable claim. Pursuant to the procedures set forth in MPEP § 821.04(a), the restriction requirement between Groups I-IV, as set forth in the Office action mailed on 08/19/2008, is hereby withdrawn and claims 68-90 are hereby rejoined and fully examined for patentability under 37 CFR 1.104. In view of the withdrawal of the restriction requirement, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See In re Ziegler, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.
- The following is an examiner's statement of reasons for allowance: The prior art fails to teach or render obvious the invention as claimed.

Newberg (U.S. 6,491,283) was considered most pertinent to applicant's disclosure. Newberg discloses a valve (fig. 9) comprising a body (10, 100) having first (103) and second open (32) ends and a passageway (11) for fluid between the ends, the first end including a first coupling means (105) for sealingly connecting the body about an opening of a first external device (not shown) and a seal (21, 84) blocking an

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open area (20; fig. 1) of the first end, the valve further including a seal displacement means (74, 130, and piston in combination) movable within the body so as to interrupt the seal permitting fluid to pass along the passageway (11) between the ends (103, 32), the coupling means (105) and the seal presenting a sterilisable mating surface for sealingly mating with a mating surface about the opening in the first external device, wherein the seal is formed between a first plastics portion (84) movable by the seal displacement means and a second plastics portion (21) disposed about the open area of the first end of the valve; wherein the second plastic portion has a protruding sharp rim (fig. 9) and the first plastic portion (84) of the seal has a curved surface area (fig. 9) so that when the valve is in the closed position, the sharp rim (edge of 21) engages the curved surface area and displaces a portion of the curved surface area thereby elastically deforming the materials of the sharp rim and the curved surface area to seal the opening of the valve; wherein the second plastic portion comprises a wall defining a bore portion having a cross-section converging towards the first end of the valve which in turn leads to a wall defining a bore portion (fig. 3) having a substantially uniform cross-section which is located adjacent the first end of the valve, the boundary between the wall defining the converging bore portion and the wall defining the uniform bore portion defining the sharp rim, the first plastic portion having a body portion (74) with a cross-section converging towards the first end of the valve and leading to an end portion with a uniform cross-section, the end portion being adjacent the first end of the valve in use and a transitional surface between the external surface of the body portion (100) and the external surface of the end portion of the first plastic portion defining the curved

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surface area so that when the opening of the valve is sealed the sharp rim engages the curved surface area and displaces a portion of the curved surface area thereby elastically deforming the materials of the sharp rim and the curved surface area.

However, Newberg does not disclose wherein each of the wall defining the converging bore portion and the wall defining the substantially uniform cross-section bore portion is non-tangential with respect to any point of the portion of the curved surface are which is displaced by the sharp rim. Modifying Newberg's wall to be non-tangential is not an obvious modification since such a modification would affect the seal between 74 and 84.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pats. Stern (3,367,626), Kujawski (4,421,298), Walker (3,985,332), Purdy (2005/0121642), and Roach (3,395,725) disclose valves wherein a sharp rim contacts a valve member to form a seal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARINA TIETJEN whose telephone number is (571) Application/Control Number: 10/566,611 Page 5

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270-5422. The examiner can normally be reached on Mon-Thurs, 9:00AM-5:00PM

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, ROBIN EVANS can be reached on (571) 272-4777. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. T./

Examiner, Art Unit 3753

/John K. Fristoe Jr./

Primary Examiner, Art Unit 3753